FIGURE 1

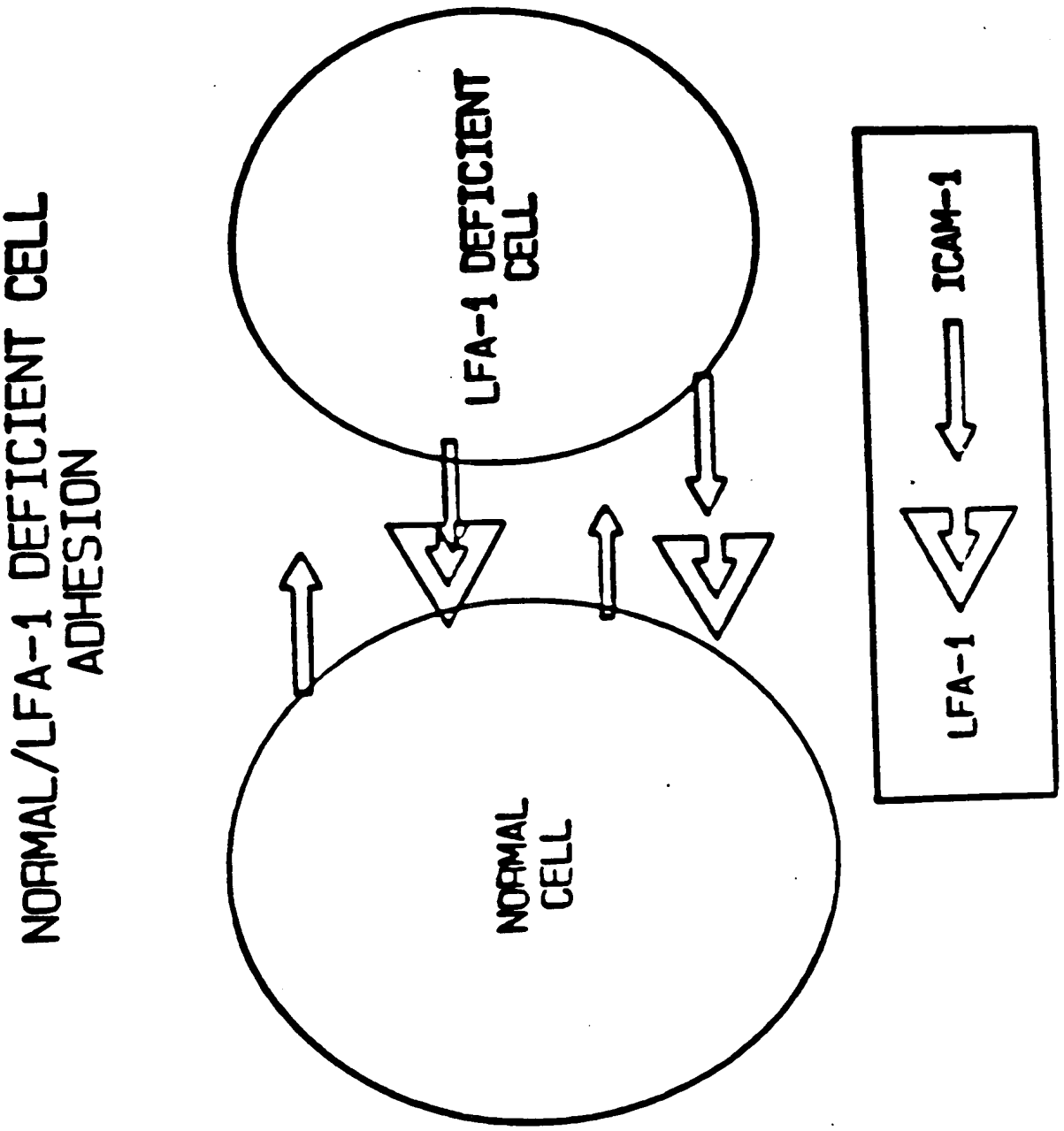
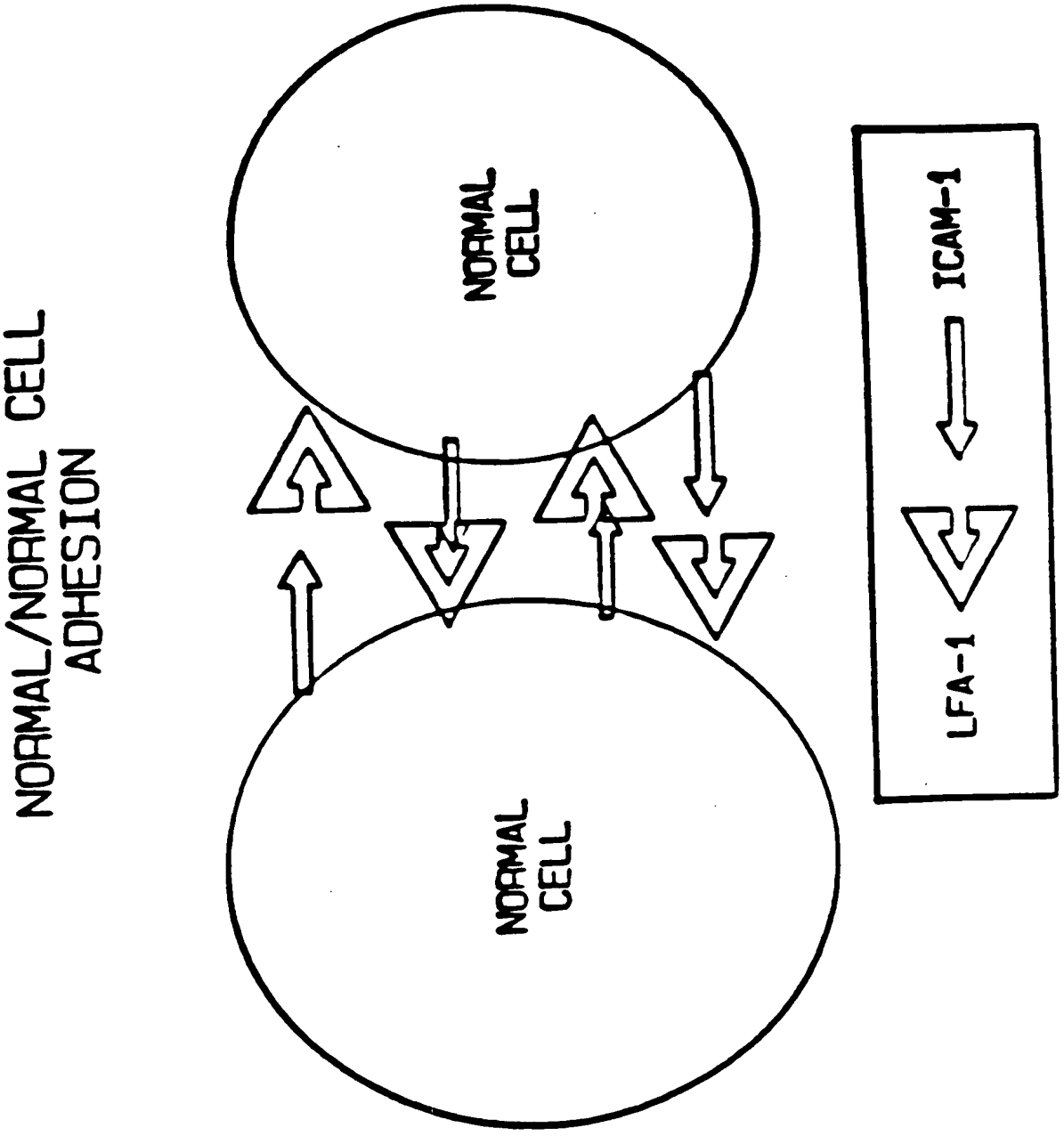

NORMAL/LFA-1 DEFICIENT CELL
ADHESION
LFA-1 DEFICIENT
CELL
NORMAL
CELL
ICAM-1
LFA-1

FIGURE 2


NORMAL/NORMAL CELL ADHESION
NORMAL CELL
NORMAL CELL
ICAM-1
LFA-1

324481

FIGURE 3

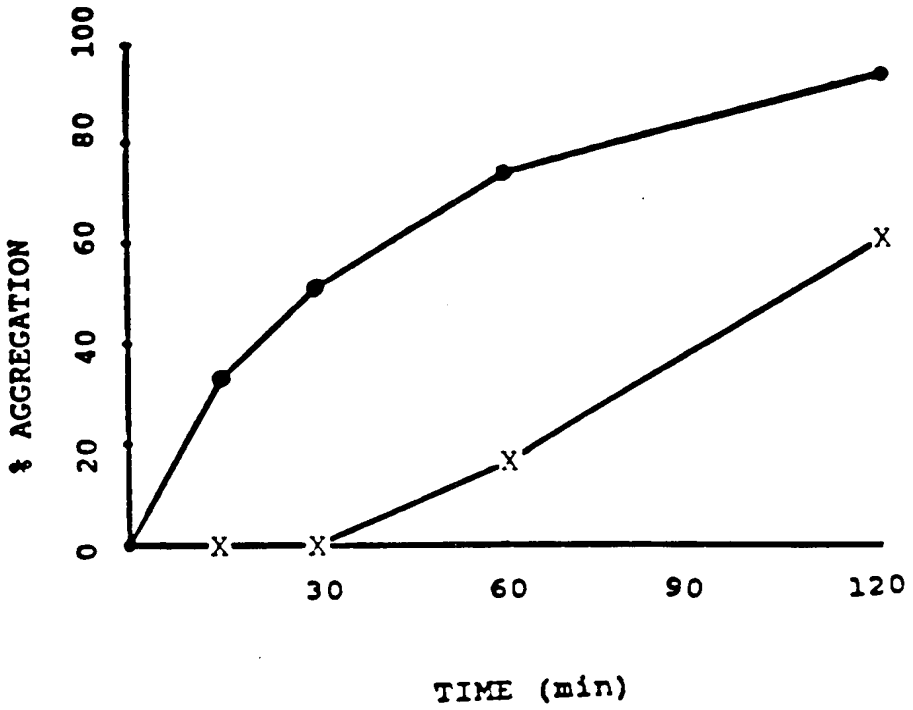
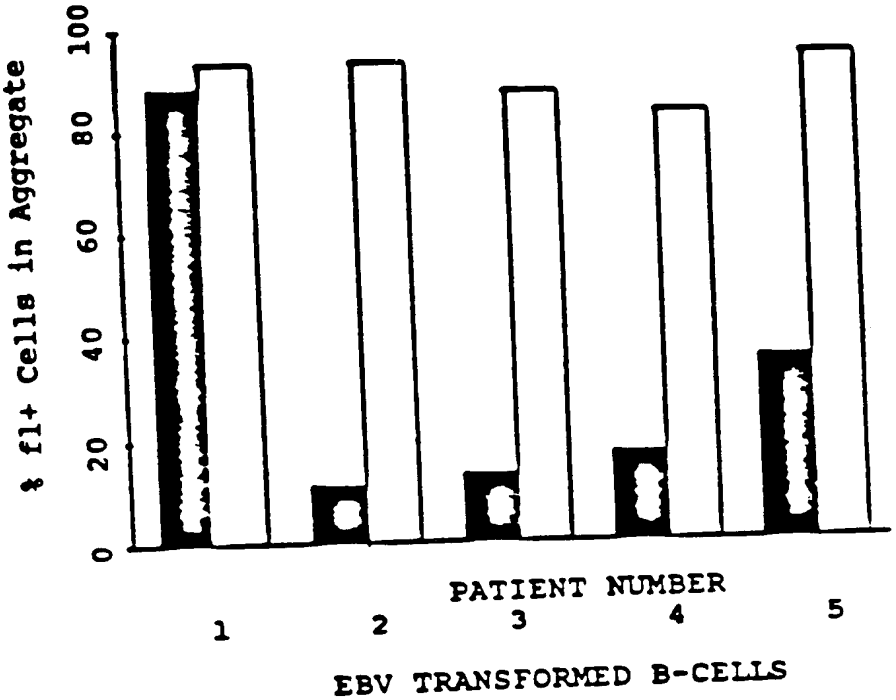


FIGURE 4


% f1+ Cells in Aggregate
0
20
40
60
80
100
PATIENT NUMBER
1
2
3
4
5
EBV TRANSFORMED B-CELLS

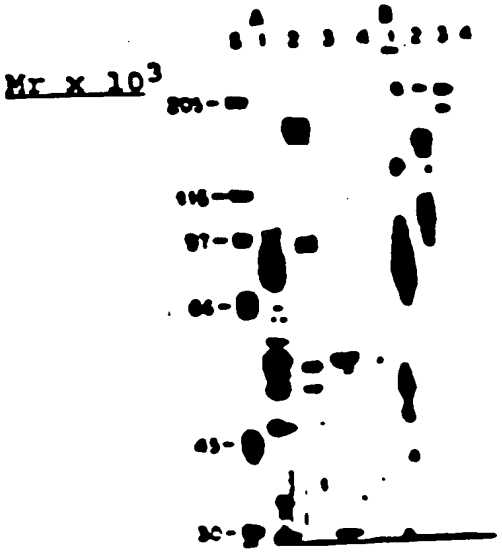


FIGURE 5

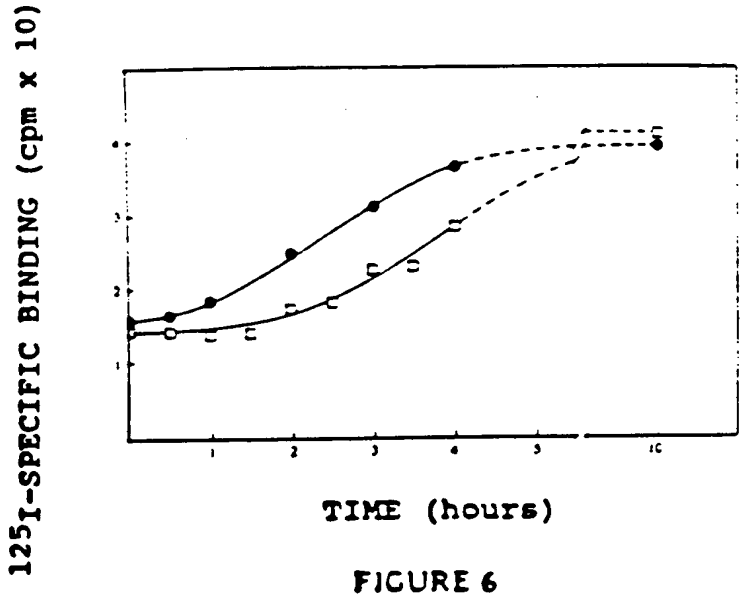


FIGURE 6

FIGURE 7

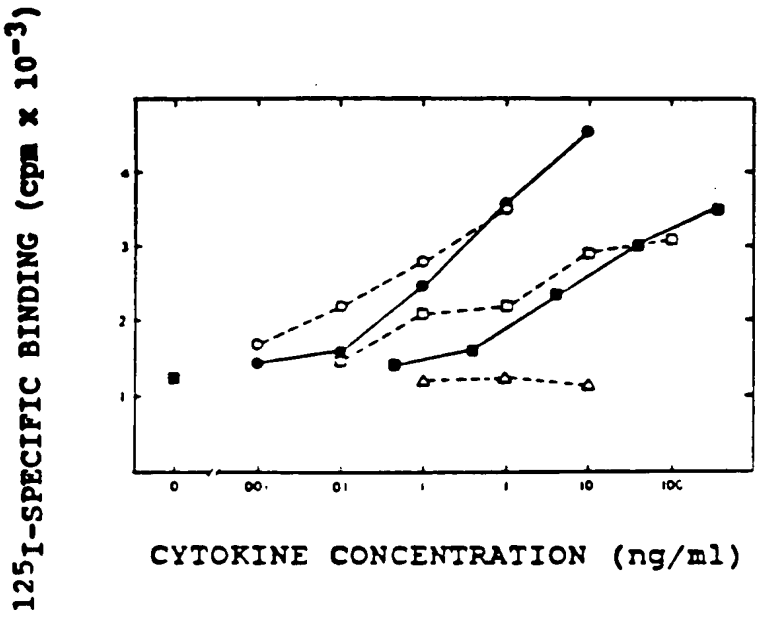
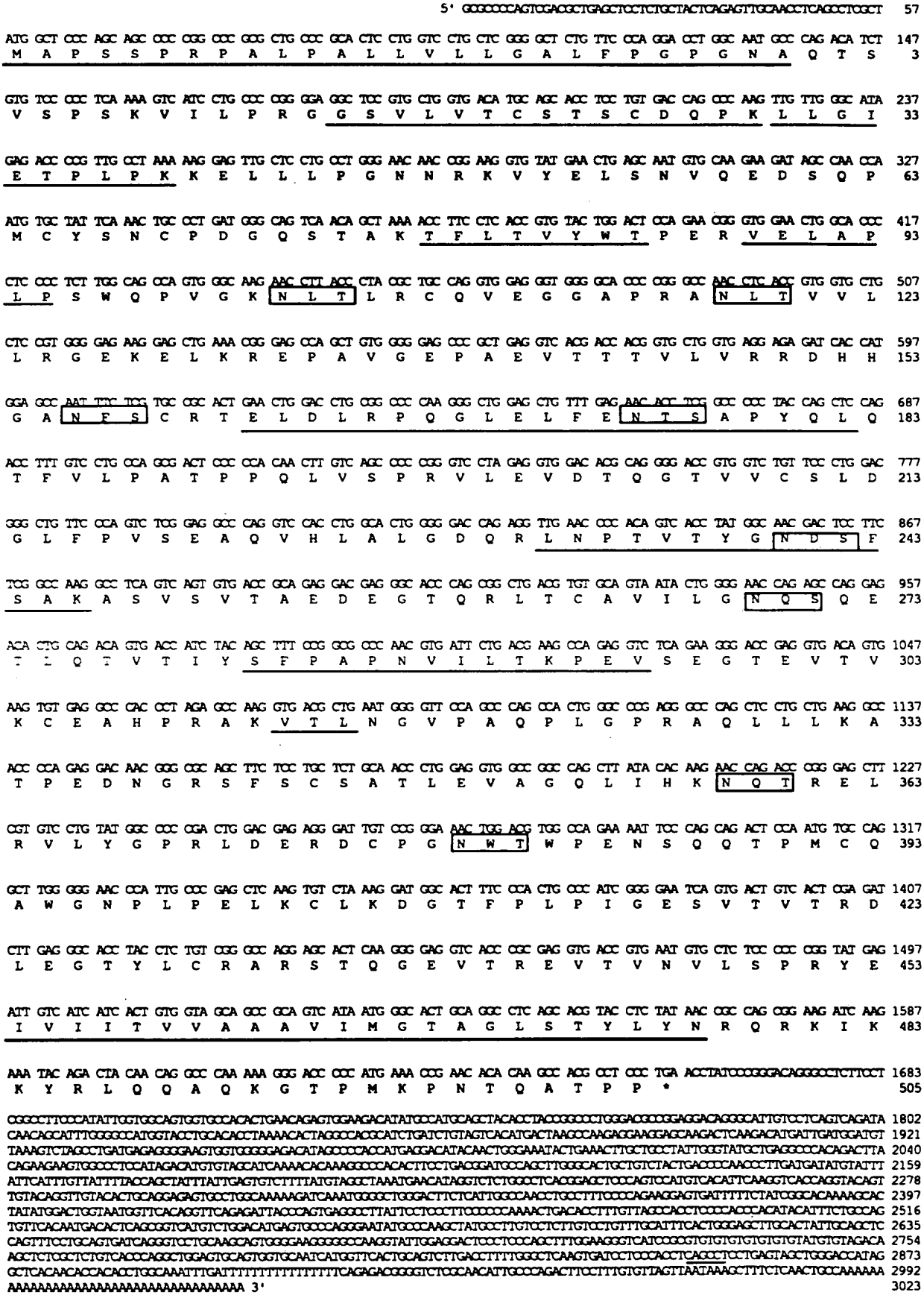

^{125}I-SPECIFIC BINDING (cpm x 10^{-3})
CYTOKINE CONCENTRATION (ng/ml)

Figure 8


5' GGGCCCCAGTCGACGCTGAGCTCCTCTGCTACTCAGAGTTGCAACCTCAGCCTGGCT 57
ATG GCT CCC AGC AGC CCC CGG CCC GCG CTG CCC GCA CTC CTG GTC CTG CTC GGG GCT CTG TTC CCA GGA CCT GGC AAT GCC CAG ACA TCT 147
M A P S S P R P A L P A L L V L L G A L F P G P G N A Q T S 3
GTG TCC CCC TCA AAA GTC ATC CTG CCC CGG GGA GGC TCC GTG CTG GTG ACA TGC AGC ACC TCC TGT GAC CAG CCC AAG TTG TTG GGC ATA 237
V S P S K V I L P R G G S V L V T C S T S C D Q P K L L G I 33
GAG ACC CCG TTG CCT AAA AAG GAG TTG CTC CTG CCT GGG AAC AAC CGG AAG GTG TAT GAA CTG AGC AAT GTG CAA GAA GAT AGC CAA CCA 327
E T P L P K K E L L L P G N N R K V Y E L S N V Q E D S Q P 63
ATG TGC TAT TCA AAC TGC CCT GAT GGG CAG TCA ACA GCT AAA ACC TTC CTC ACC GTG TAC TGG ACT CCA GAA CGG GTG GAA CTG GCA CCC 417
M C Y S N C P D G Q S T A K T F L T V Y W T P E R V E L A P 93
CTC CCC TCT TGG CAG CCA GTG GGC AAG AAC CTT ACC CTA CGC TGC CAG GTG GAG GGT GGG GCA CCC CGG GCC AAC CTC ACC GTG GTG CTG 507
L P S W Q P V G K N L T L R C Q V E G G A P R A N L T V V L 123
CTC CGT GGG GAG AAG GAG CTG AAA CGG GAG CCA GCT GTG GGG GAG CCC GCT GAG GTC ACG ACC ACG GTG CTG GTG AGG AGA GAT CAC CAT 597
L R G E K E L K R E P A V G E P A E V T T T V L V R R D H H 153
GGA GCC AAT TTC TCC TGC CGC ACT GAA CTG GAC CTG CGG CCC CAA GGG CTG GAG CTG TTT GAG AAC ACC TCG GCC CCC TAC CAG CTC CAG 687
G A N F S C R T E L D L R P Q G L E L F E N T S A P Y Q L Q 183
ACC TTT GTC CTG CCA GCG ACT CCC CCA CAA CTT GTC AGC CCC CGG GTC CTA GAG GTG GAC ACG CAG GGG ACC GTG GTC TGT TCC CTG GAC 777
T F V L P A T P P Q L V S P R V L E V D T Q G T V V C S L D 213
GGG CTG TTC CCA GTC TCG GAG GCC CAG GTC CAC CTG GCA CTG GGG GAC CAG AGG TTG AAC CCC ACA GTC ACC TAT GGC AAC GAC TCC TTC 867
G L F P V S E A Q V H L A L G D Q R L N P T V T Y G N D S F 243
TCG GCC AAG GCC TCA GTC AGT GTG ACC GCA GAG GAC GAG GGC ACC CAG CGG CTG ACG TGT GCA GTA ATA CTG GGG AAC CAG AGC CAG GAG 957
S A K A S V S V T A E D E G T Q R L T C A V I L G N Q S Q E 273
ACA CTG CAG ACA GTG ACC ATC TAC AGC TTT CCG GCG CCC AAC GTG ATT CTG ACG AAG CCA GAG GTC TCA GAA GGG ACC GAG GTG ACA GTG 1047
T L Q T V T I Y S F P A P N V I L T K P E V S E G T E V T V 303
AAG TGT GAG GCC CAC CCT AGA GCC AAG GTG ACG CTG AAT GGG GTT CCA GCC CAG CCA CTG GGC CCG AGG GCC CAG CTC CTG CTG AAG GCC 1137
K C E A H P R A K V T L N G V P A Q P L G P R A Q L L L K A 333
ACC CCA GAG GAC AAC GGG CGC AGC TTC TCC TGC TCT GCA ACC CTG GAG GTG GCC GGC CAG CTT ATA CAC AAG AAC CAG ACC CGG GAG CTT 1227
T P E D N G R S F S C S A T L E V A G Q L I H K N Q T R E L 363
CGT GTC CTG TAT GGC CCC CGA CTG GAC GAG AGG GAT TGT CCG GGA AAC TGG ACG TGG CCA GAA AAT TCC CAG CAG ACT CCA ATG TGC CAG 1317
R V L Y G P R L D E R D C P G N W T W P E N S Q Q T P M C Q 393
GCT TGG GGG AAC CCA TTG CCC GAG CTC AAG TGT CTA AAG GAT GGC ACT TTC CCA CTG CCC ATC GGG GAA TCA GTG ACT GTC ACT CGA GAT 1407
A W G N P L P E L K C L K D G T F P L P I G E S V T V T R D 423
CTT GAG GGC ACC TAC CTC TGT CGG GCC AGG AGC ACT CAA GGG GAG GTC ACC CGC GAG GTG ACC GTG AAT GTG CTC TCC CCC CGG TAT GAG 1497
L E G T Y L C R A R S T Q G E V T R E V T V N V L S P R Y E 453
ATT GTC ATC ATC ACT GTG GTA GCA GCC GCA GTC ATA ATG GGC ACT GCA GGC CTC AGC ACG TAC CTC TAT AAC CGC CAG CGG AAG ATC AAG 1587
I V I I T V V A A A V I M G T A G L S T Y L Y N R Q R K I K 483
AAA TAC AGA CTA CAA CAG GCC CAA AAA GGG ACC CCC ATG AAA CCG AAC ACA CAA GCC ACG CCT CCC TGA ACCTATCCCGGGACAGGGCCTCTTCCT 1683
K Y R L Q Q A Q K G T P M K P N T Q A T P P * 505
CGGCCTTCCCATATTGGTGGCAGTGGTGCCACACTGAACAGAGTGGAAGACATATGCCATGCAGCTACACCTACCGGCCCTGGGACGCCGGAGGACAGGGCATTGTCCTCAGTCAGATA 1802
CAACAGCATTTGGGGCCATGGTACCTGCACACCTAAAACACTAGGCCACGCATCTGATCTGTAGTCACATGACTAAGCCAAGAGGAAGGAGCAAGACTCAAGACATGATTGATGGATGT 1921
TAAAGTCTAGCCTGATGAGAGGGGAAGTGGTGGGGAGACATAGCCCCACCATGAGGACATACAACTGGGAAATACTGAAACTTGCTGCCTATTGGGTATGCTGAGGCCCACAGACTTA 2040
CAGAAGAAGTGGCCCTCCATAGACATGTGTAGCATCAAAACACAAAGGCCCACACTTCCTGACGGATGCCAGCTTGGGCACTGCTGTCTACTGACCCCAACCCTTGATGATATGTATTT 2159
ATTCATTGTTATTTTACCAGCTATTTATTGAGTGTCTTTTATGTAGGCTAAATGAACATAGGTCTCTGGCCTCACGGAGCTCCCAGTCCATGTCACATTCAAGGTCACCAGGTACAGT 2278
TGTACAGGTTGTACACTGCAGGAGAGTGCCTGGCAAAAAGATCAAATGGGGCTGGGACTTCTCATTGGCCAACCTGCCTTTCCCCAGAAGGAGTGATTTTTCTATCGGCACAAAAGCAC 2397
TATATGGACTGGTAATGGTTCACAGGTTCAGAGATTACCCAGTGAGGCCTTATTCCTCCCTTCCCCCCAAAACTGACACCTTTGTTAGCCACCTCCCCACCCACATACATTTCTGCCAG 2516
TGTTCACAATGACACTCAGCGGTCATGTCTGGACATGAGTGCCCAGGGAATATGCCCAAGCTATGCCTTGTCCTCTTGTCCTGTTTGCATTTCACTGGGAGCTTGCACTATTGCAGCTC 2635
CAGTTTCCTGCAGTGATCAGGGTCCTGCAAGCAGTGGGGAAGGGGCCAAGGTATTGGAGGACTCCCTCCCAGCTTTGGAAGGGTCATCCGCGTGTGTGTGTGTGTATGTGTAGACA 2754
AGCTCTCGCTCTGTCACCCAGGCTGGAGTGCAGTGGTGCAATCATGGTTCACTGCAGTCTTGACCTTTTGGGCTCAAGTGATCCTCCCACCTCAGCCTCCTGAGTAGCTGGGACCATAG 2873
GCTCACAACACCACACCTGGCAAATTTGATTTTTTTTTTTTTTTTCAGAGACGGGGTCTCGCAACATTGCCCAGACTTCCTTTGTGTTAGTTAATAAAGCTTTCTCAACTGCCAAAAAA 2992
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3' 3023

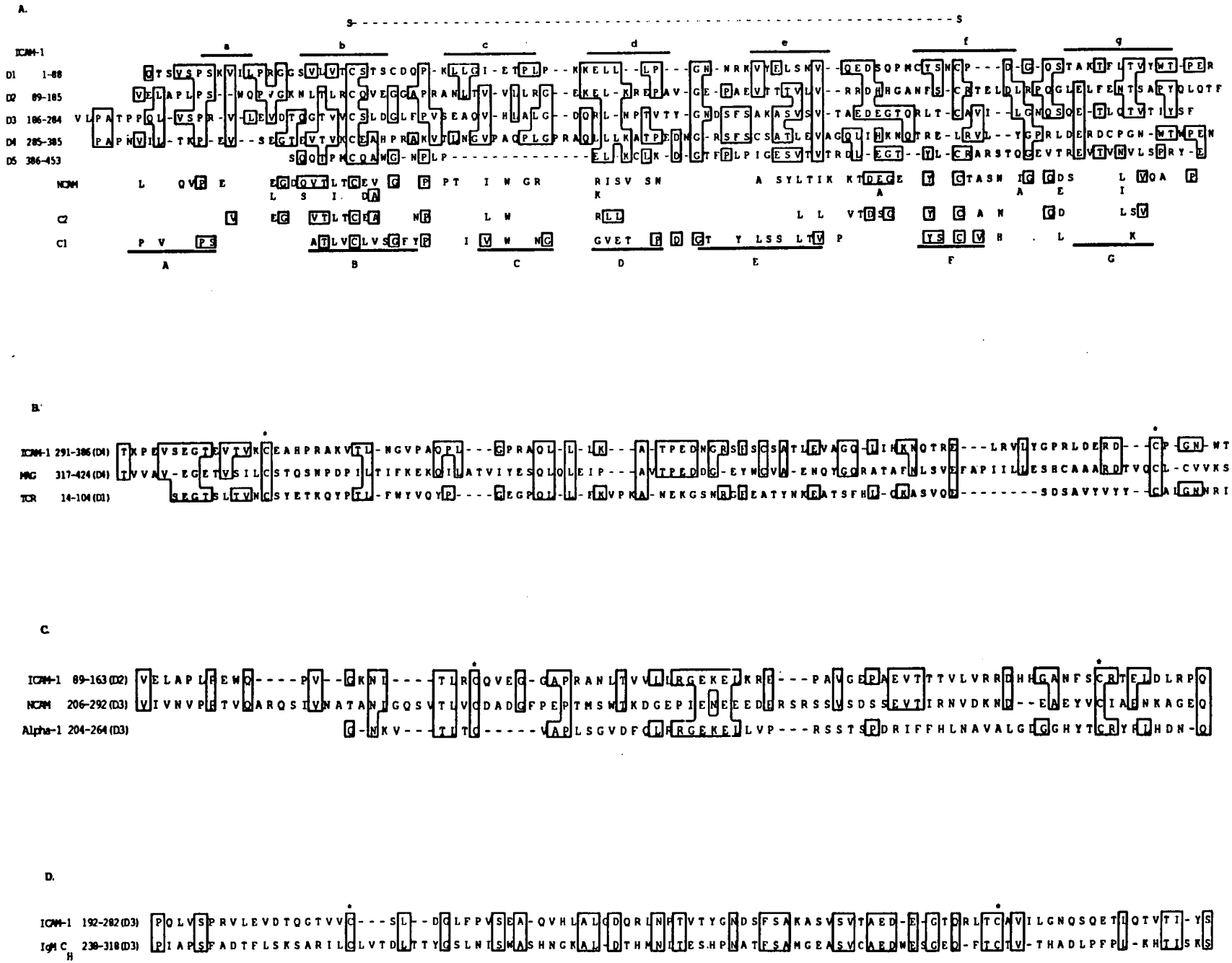
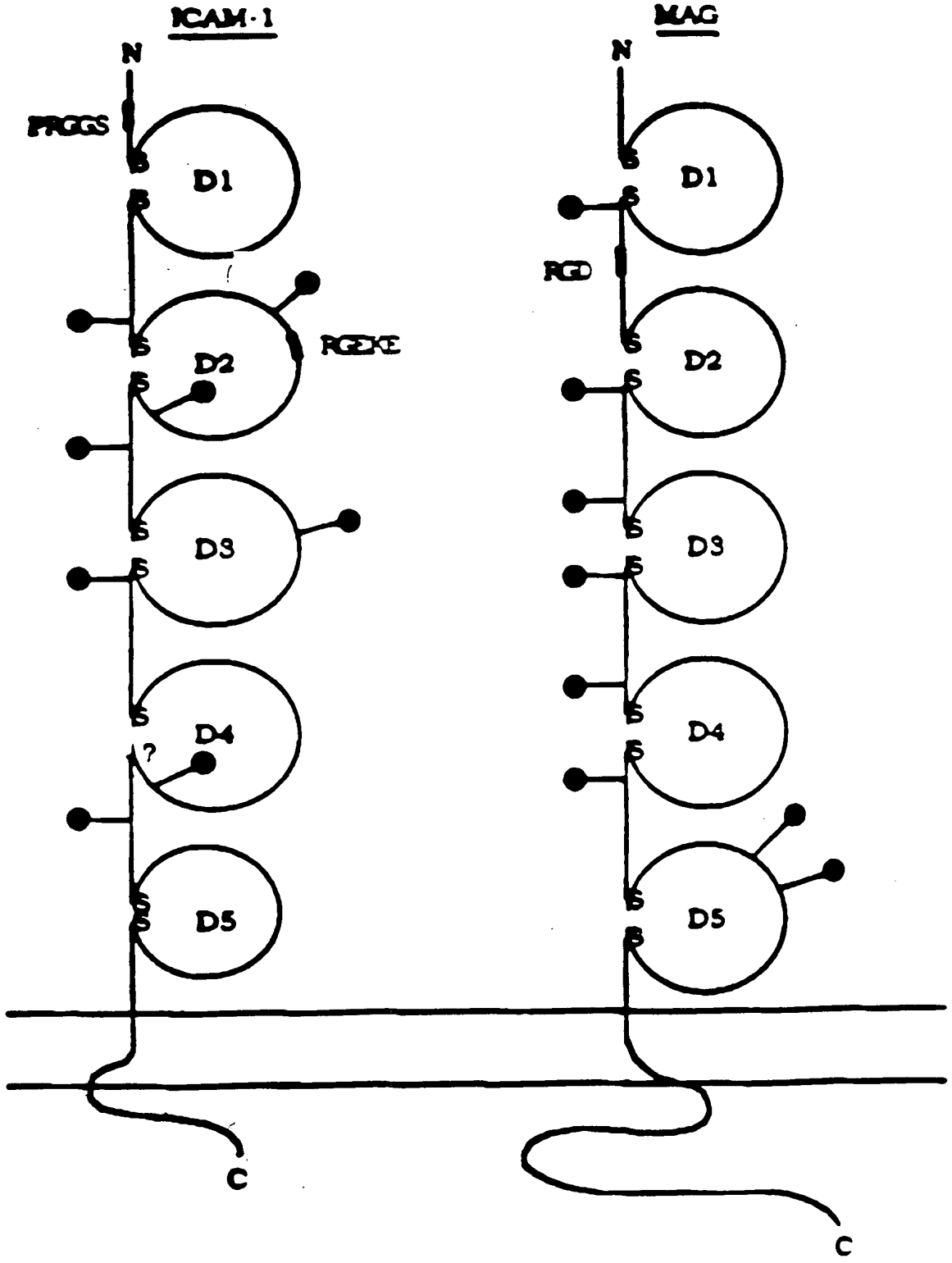


Figure 9


ICAM-1
MAG
N
N
PRGGS
D1
D1
RGD
D2
D2
RGEKE
D3
D3
D4
D4
?
D5
D5
C
C

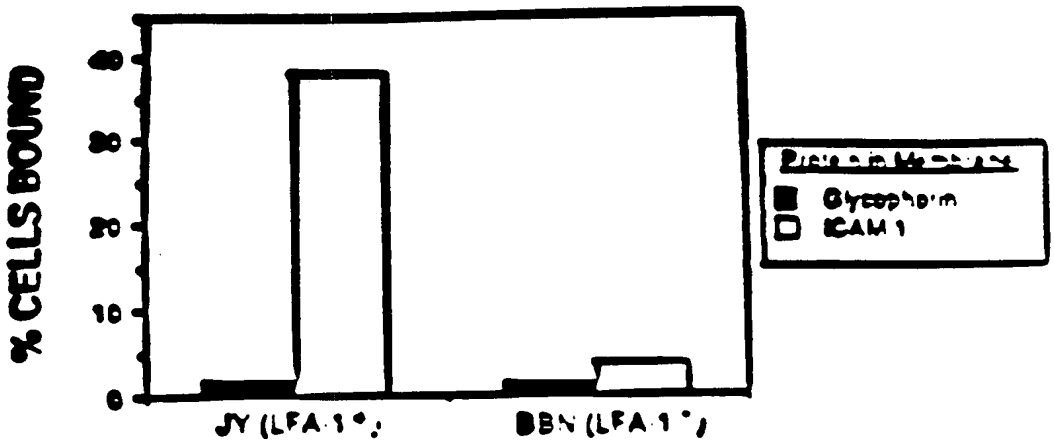


Figure 11 LFA-1 positive EBV-transformed B-lymphoblastoid cells bind to ICAM-1 in planar membranes.

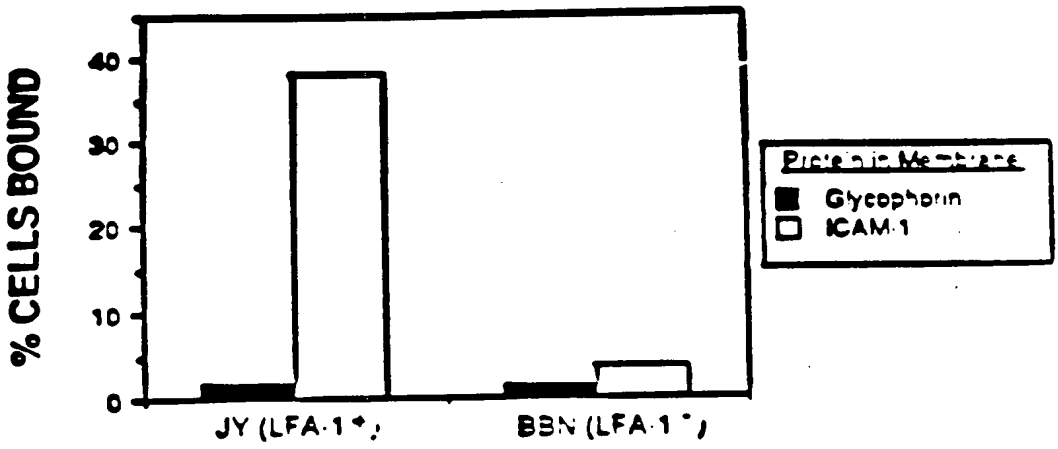


Figure 12 LFA-1 positive EBV-transformed B-lymphoblastoid cells bind to ICAM-1 in planar membranes.

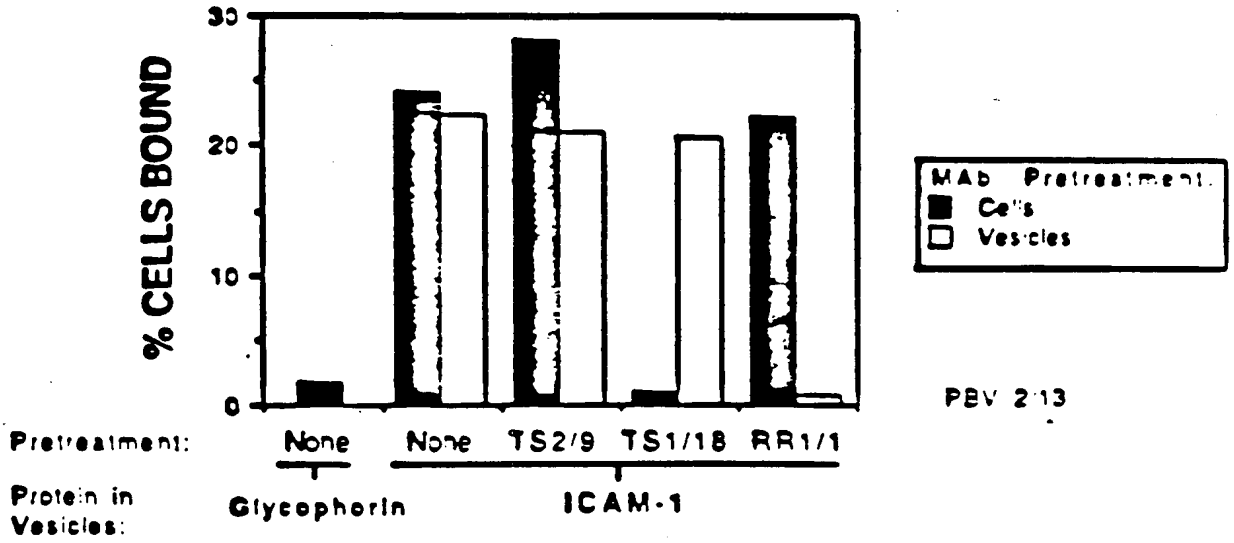


Figure 13 Inhibition of binding of JY B-lymphoblastoid cell binding to ICAM-1 in plastic-bound vesicles by pretreatment of cells or vesicles with monoclonal antibodies.

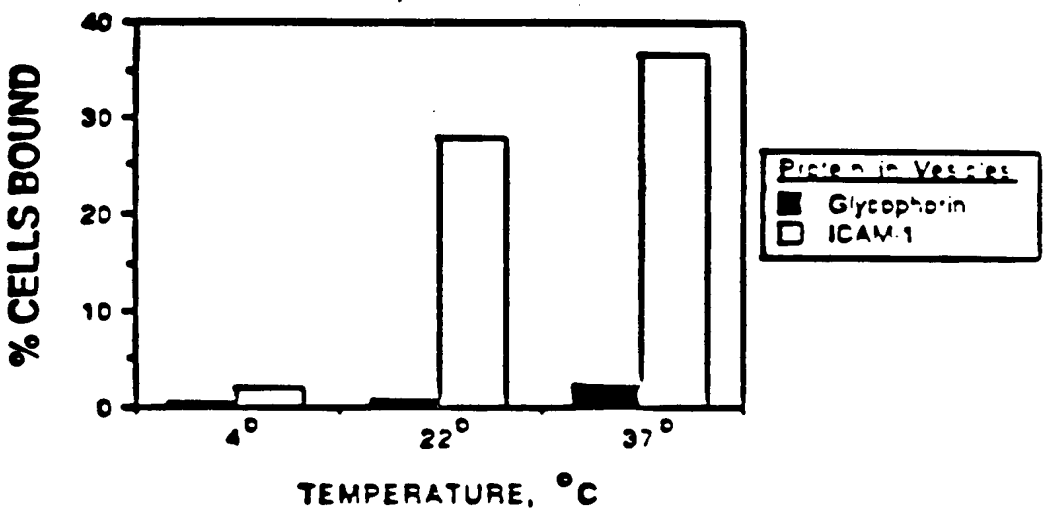


Figure 14 Effect of temperature on binding of T-lymphoblasts to ICAM-1 in plastic-bound vesicles.

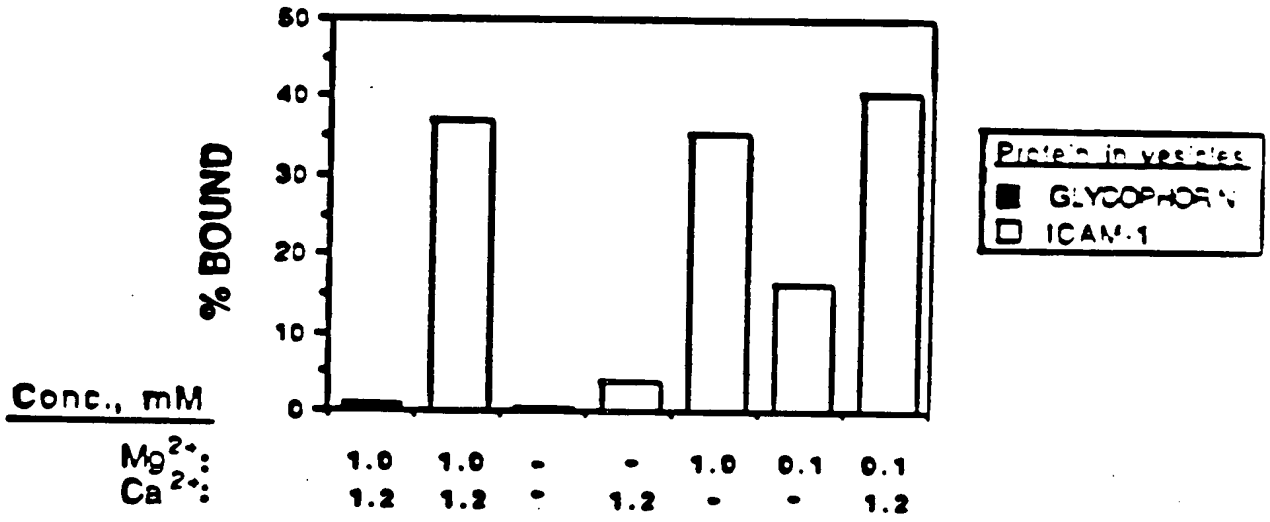


Figure 15 Divalent cation requirement for binding of T-lymphoblasts to ICAM-1 in plastic-bound vesicles.

FIGURE 16 THE EFFECT OF ANTI-ADHESION ANTIBODY ON THE OKT3 INDUCED PROLIFERATION OF HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS

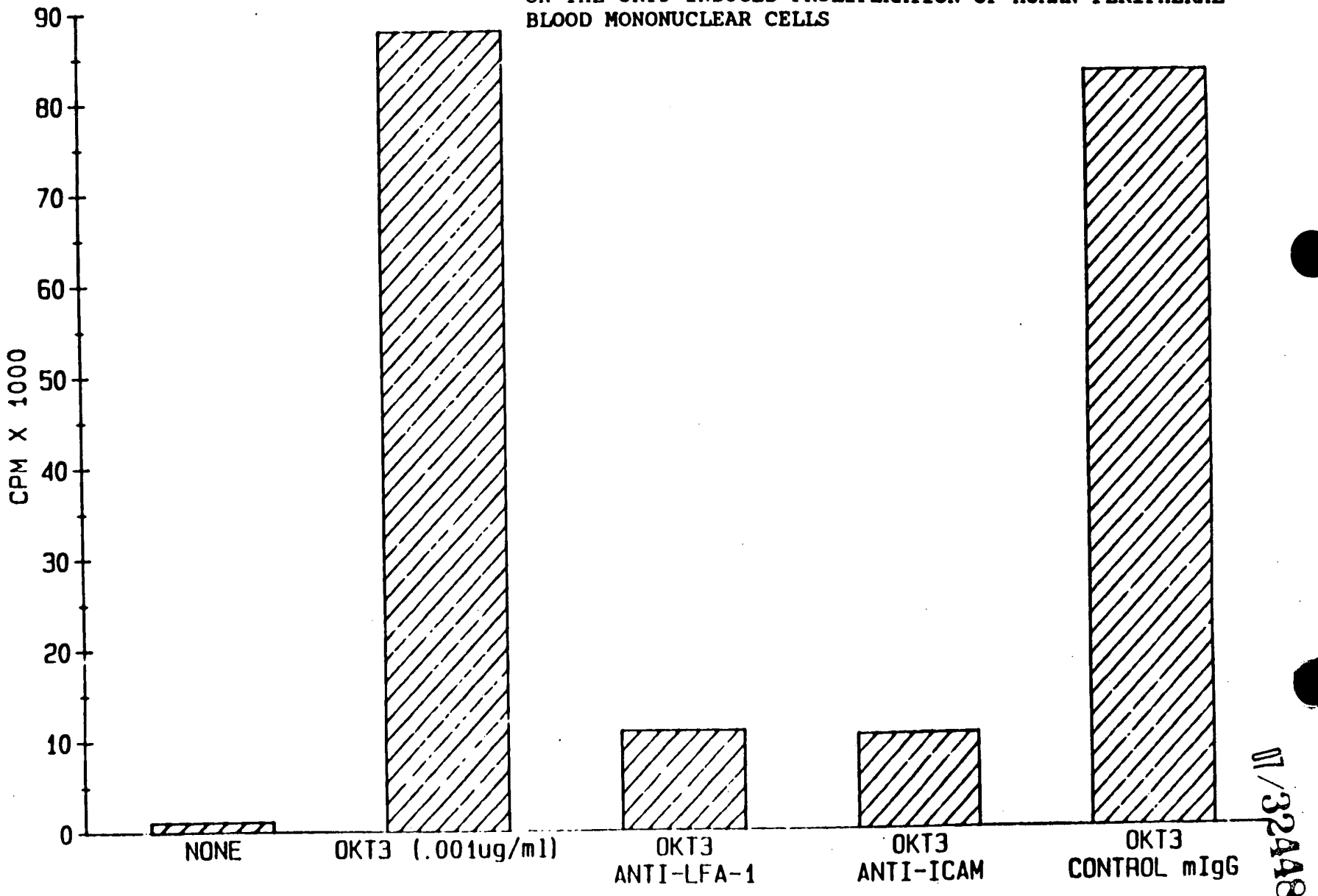


FIGURE 17 THE EFFECT OF ANTI-ADHESION ANTIBODY ON THE CONCANAVALIN A INDUCED PROLIFERATION OF HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS

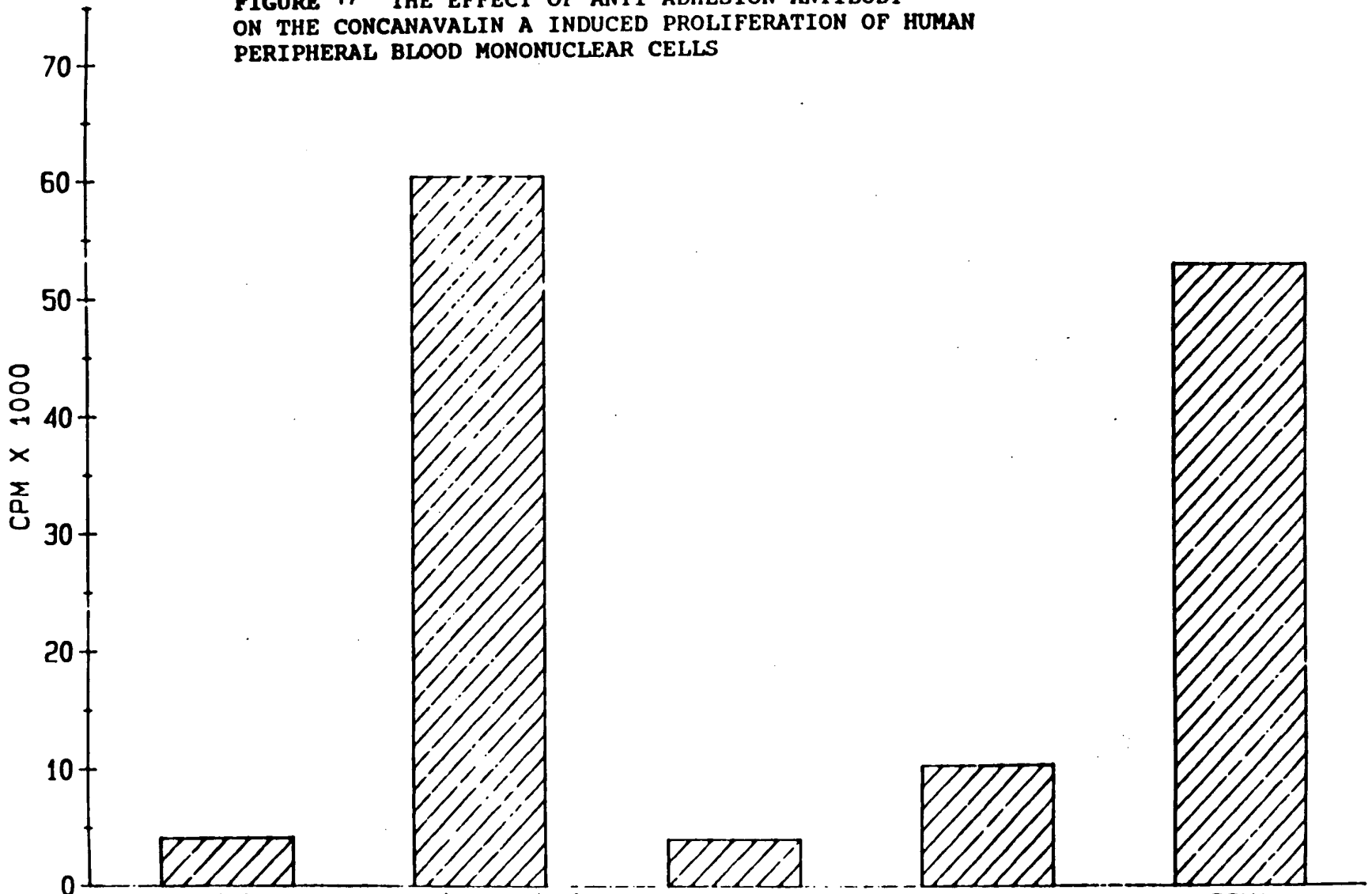


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FIGURE 18 THE EFFECT OF ANTI-ADHESION ANTIBODY ON THE KLH INDUCED PROLIFERATION OF HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS

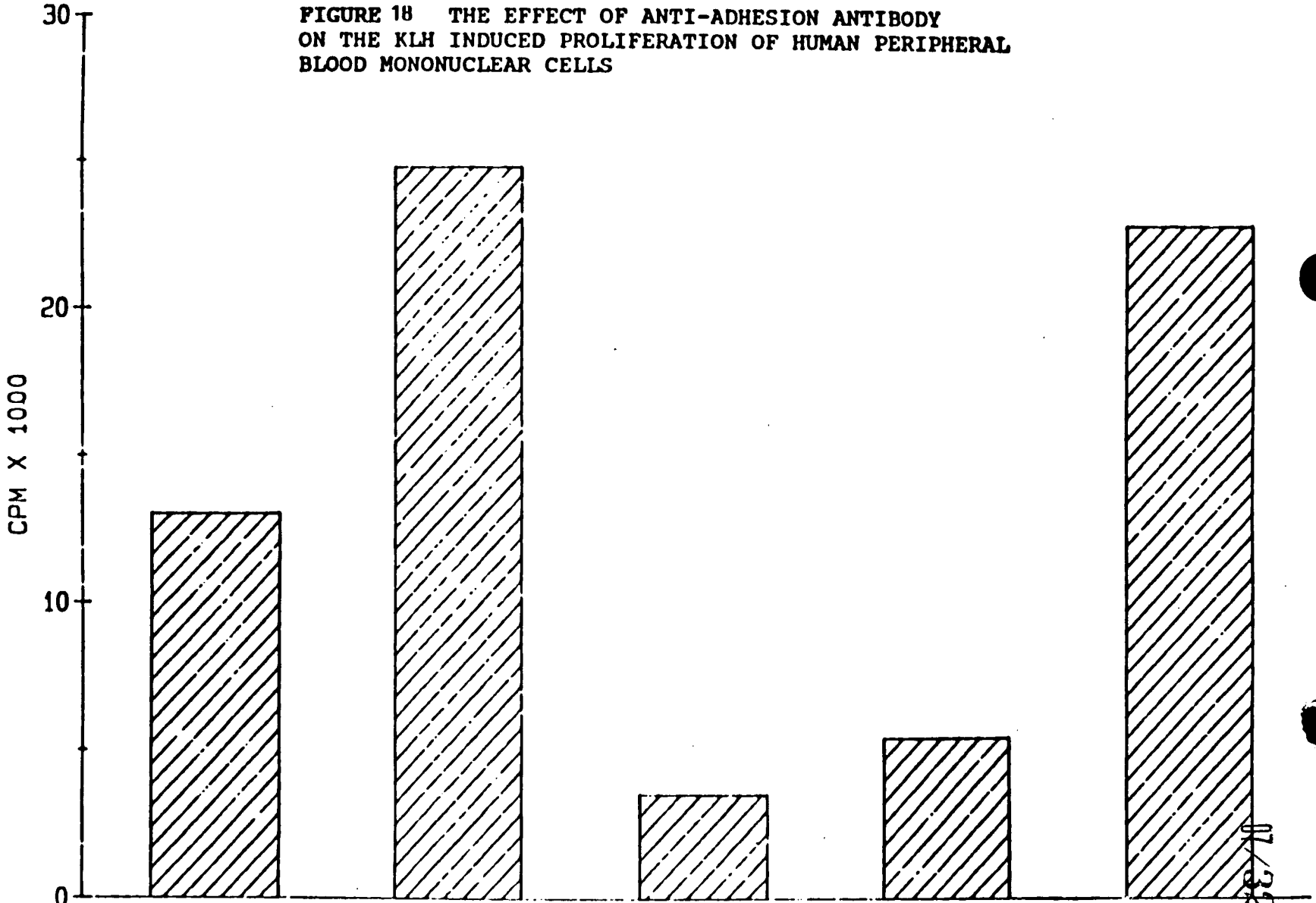

FIGURE 19 THE EFFECT OF ANTI-ADHESION ANTIBODY ON THE TETANUS TOXOID INDUCED PROLIFERATION OF HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS

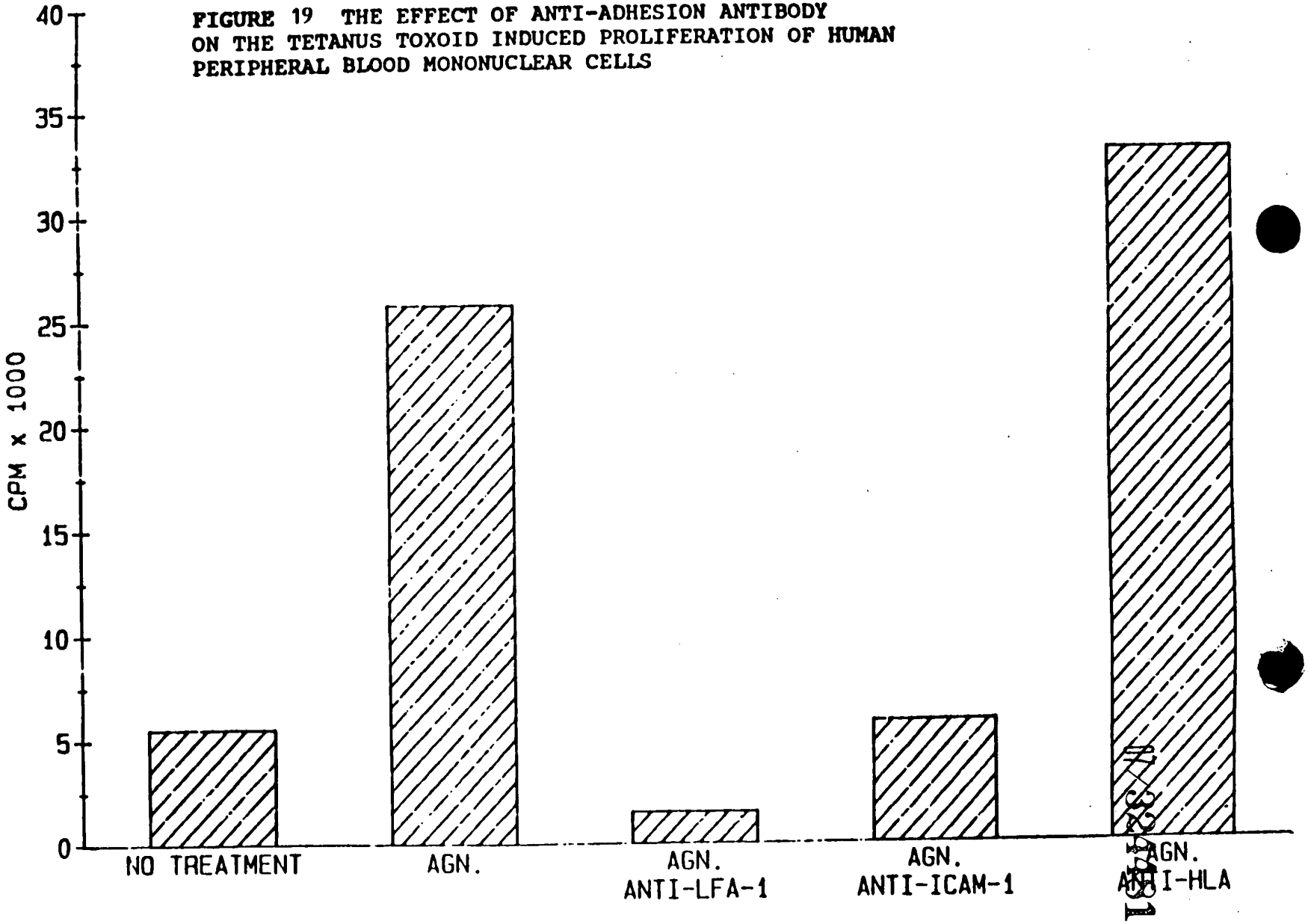

Figure 21

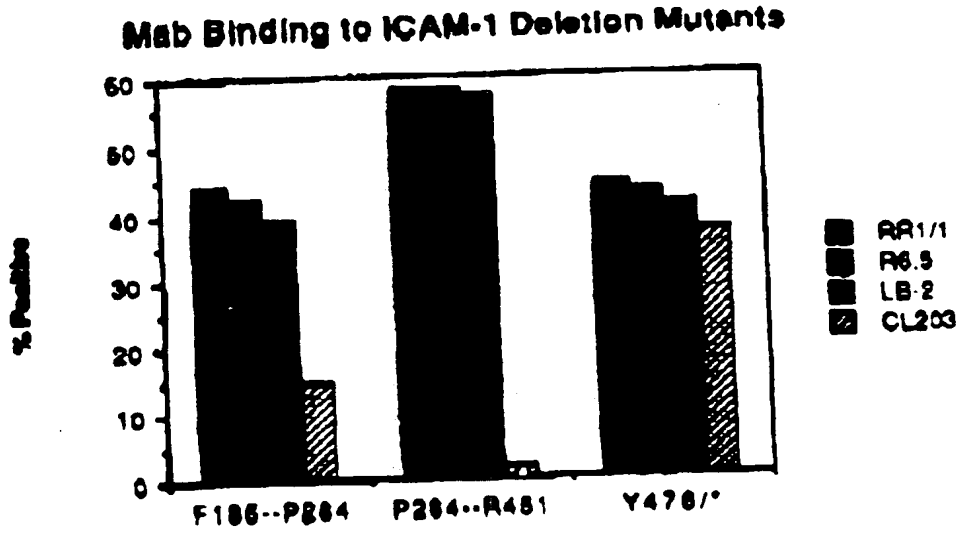
Mab Binding to ICAM-1 Deletion Mutants
% Positive
60
50
40
30
20
10
0
F186--P284
P284--R451
Y478/*
RR1/1
R6.5
LB-2
CL203

Figure ~~21~~ 22

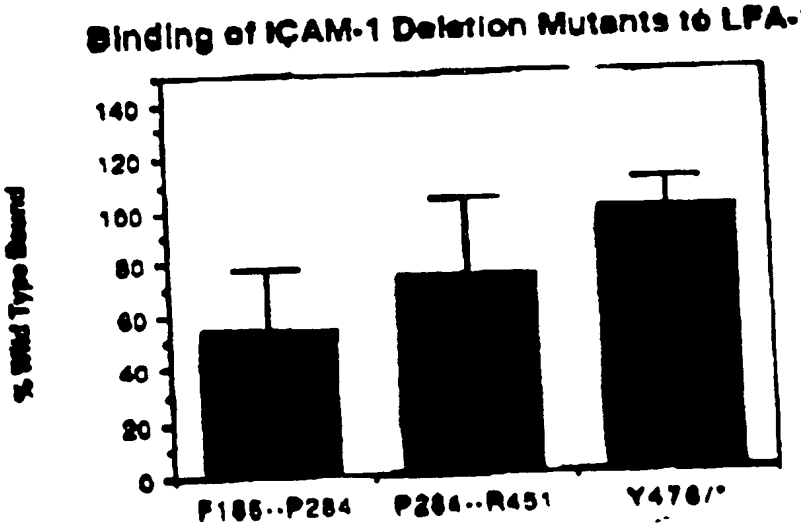
Binding of ICAM-1 Deletion Mutants to LFA-1
% Wild Type Bound
140
120
100
80
60
40
20
0
F185--P284
P284--R451
Y478/*

Figure 23

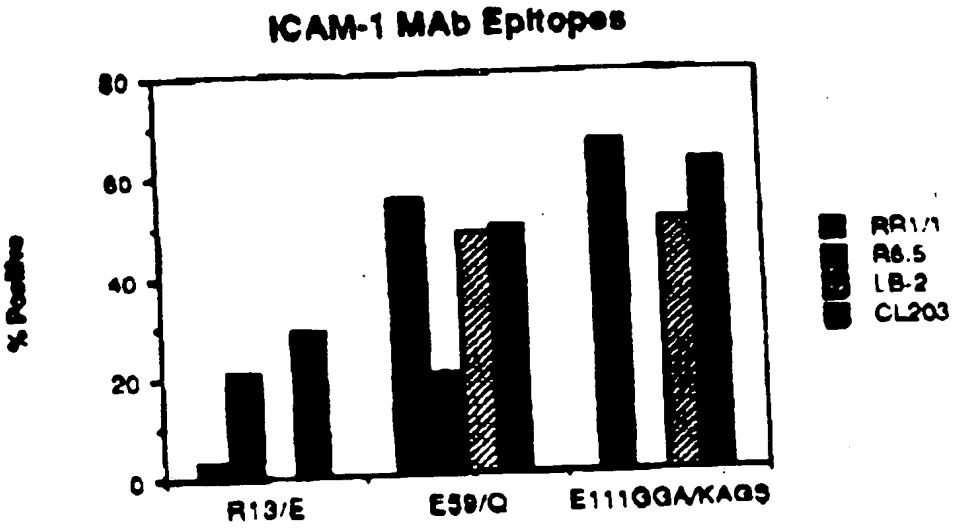
ICAM-1 MAb Epitopes
% Positive
80
60
40
20
0
R13/E
E59/Q
E111GGA/KAGS
RR1/1
R6.5
LB-2
CL203

Figure ~~24~~ ~~25~~ 24

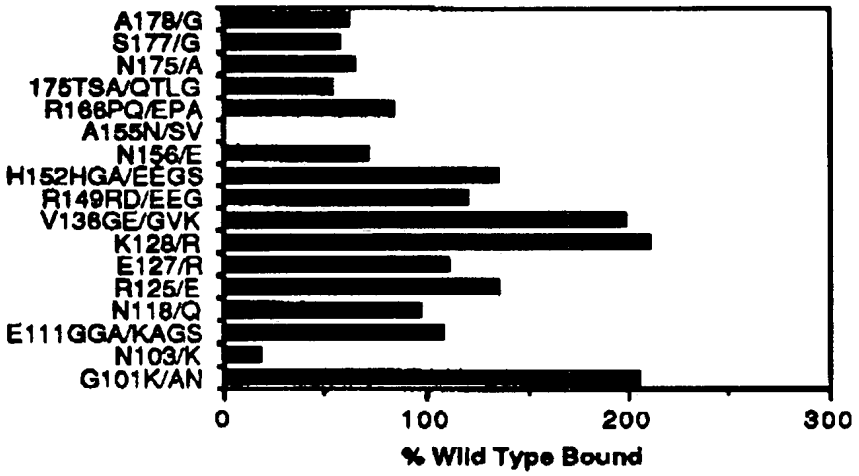

Figure 25

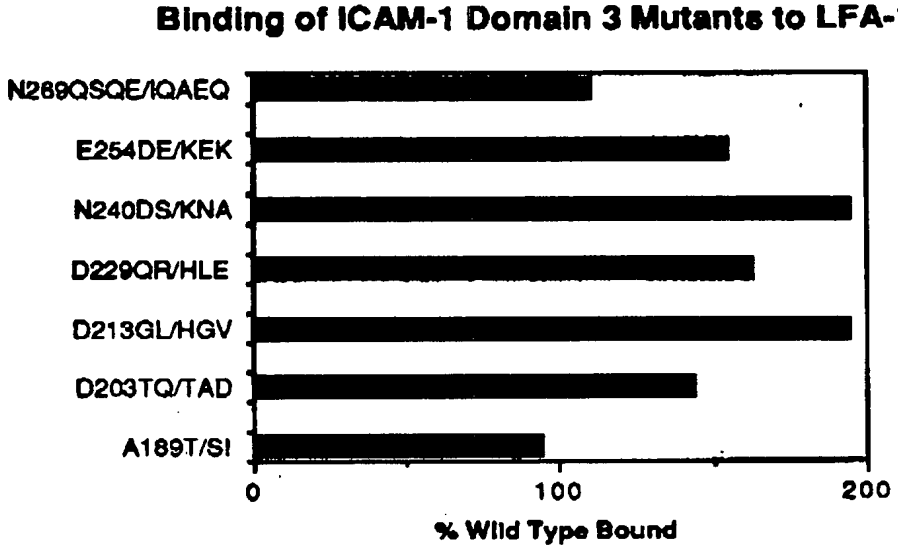
Binding of ICAM-1 Domain 3 Mutants to LFA-1
N289QSQE/IQAEQ
E254DE/KEK
N240DS/KNA
D229QR/HLE
D213GL/HGV
D203TQ/TAD
A189T/SI
0
100
200
% Wild Type Bound

Figure ~~25~~ 26

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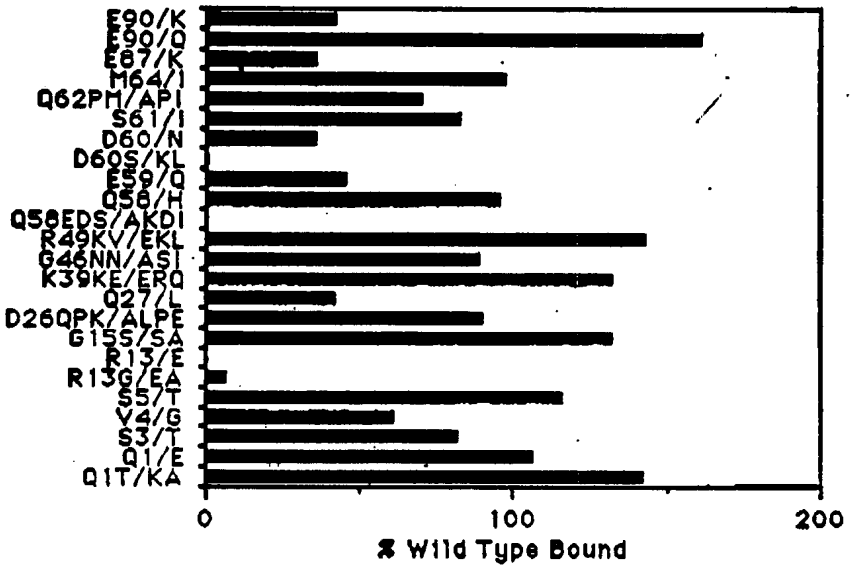
Binding of ICAM-1 Domain 1 Mutants to LFA-1



11

ICAM Amino Terminal Domain Homology

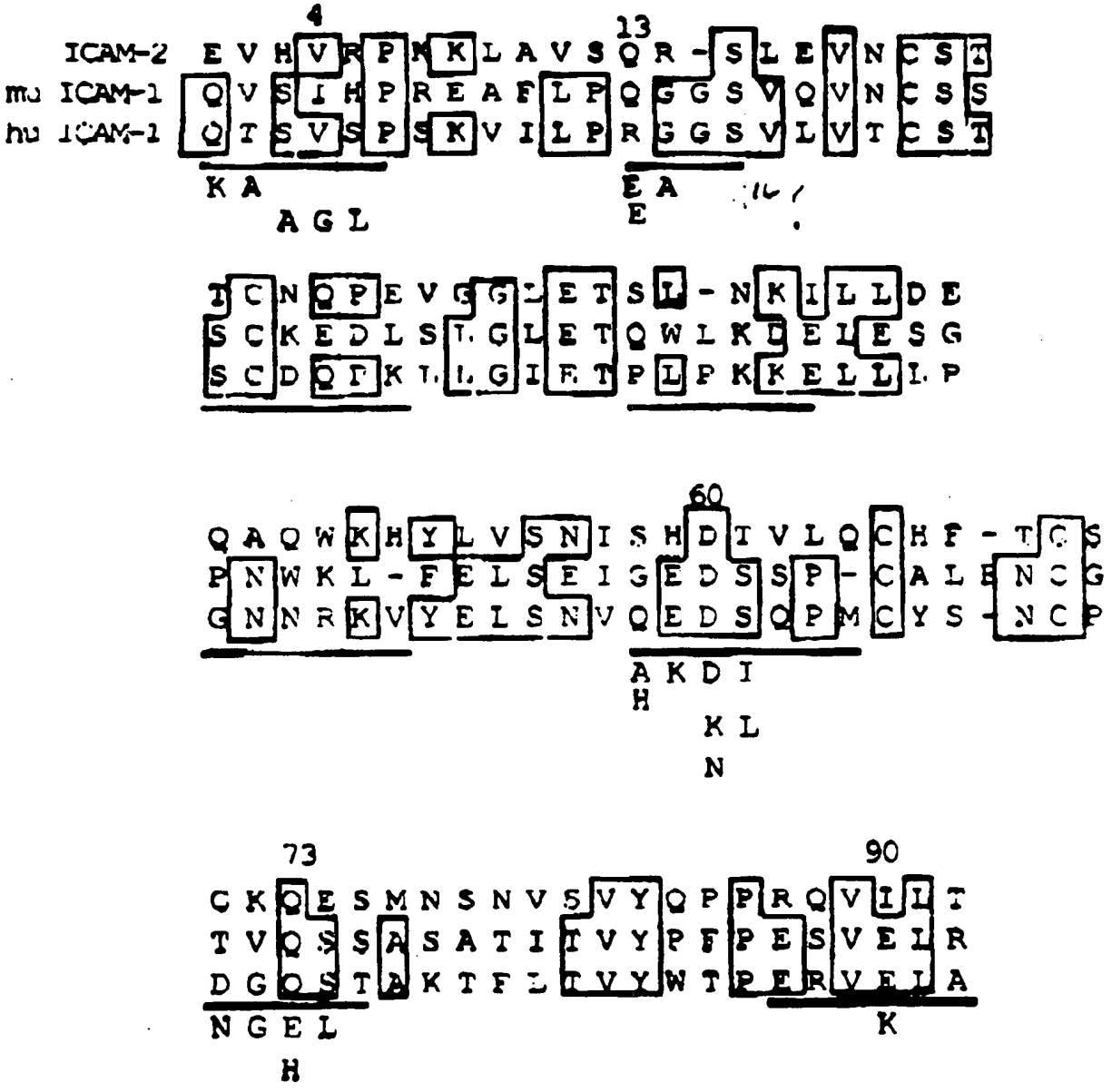


Figure 27